

FIG.1

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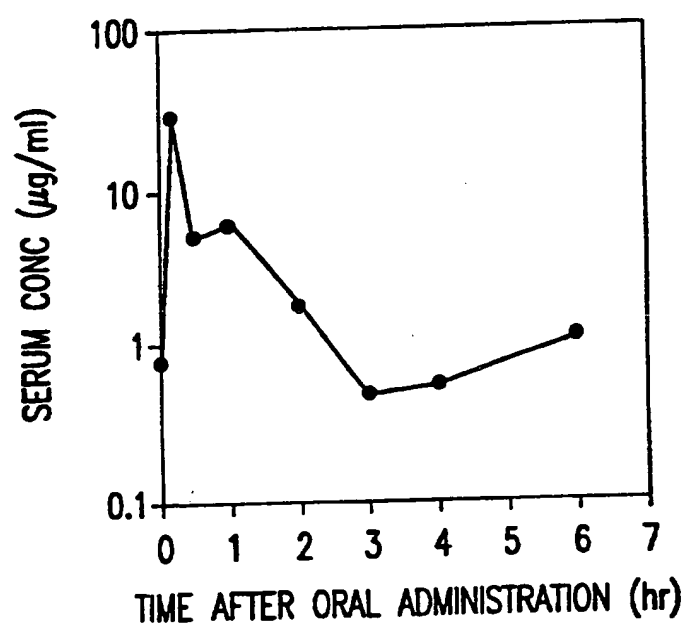
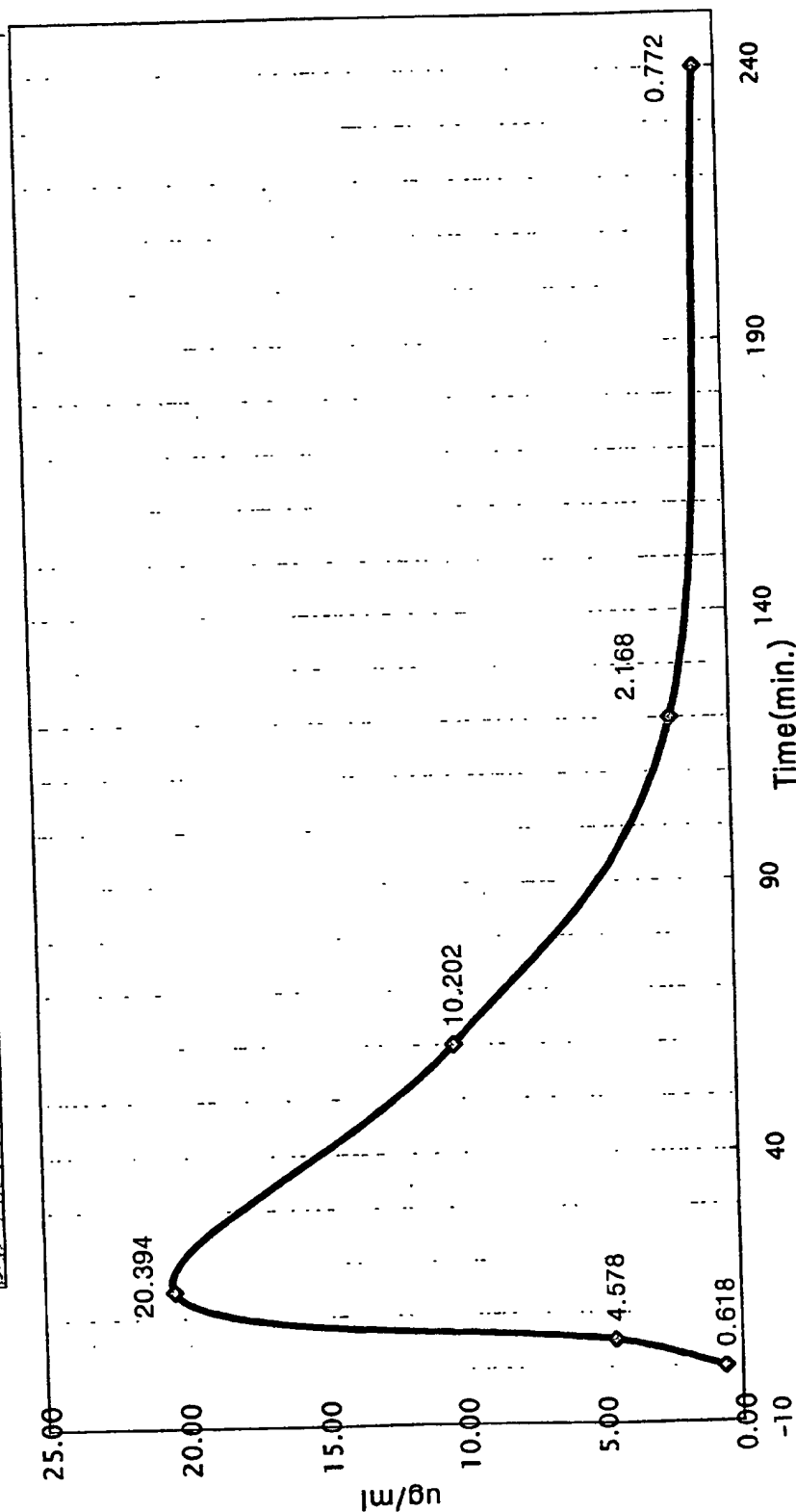


FIG.2

Figure 3

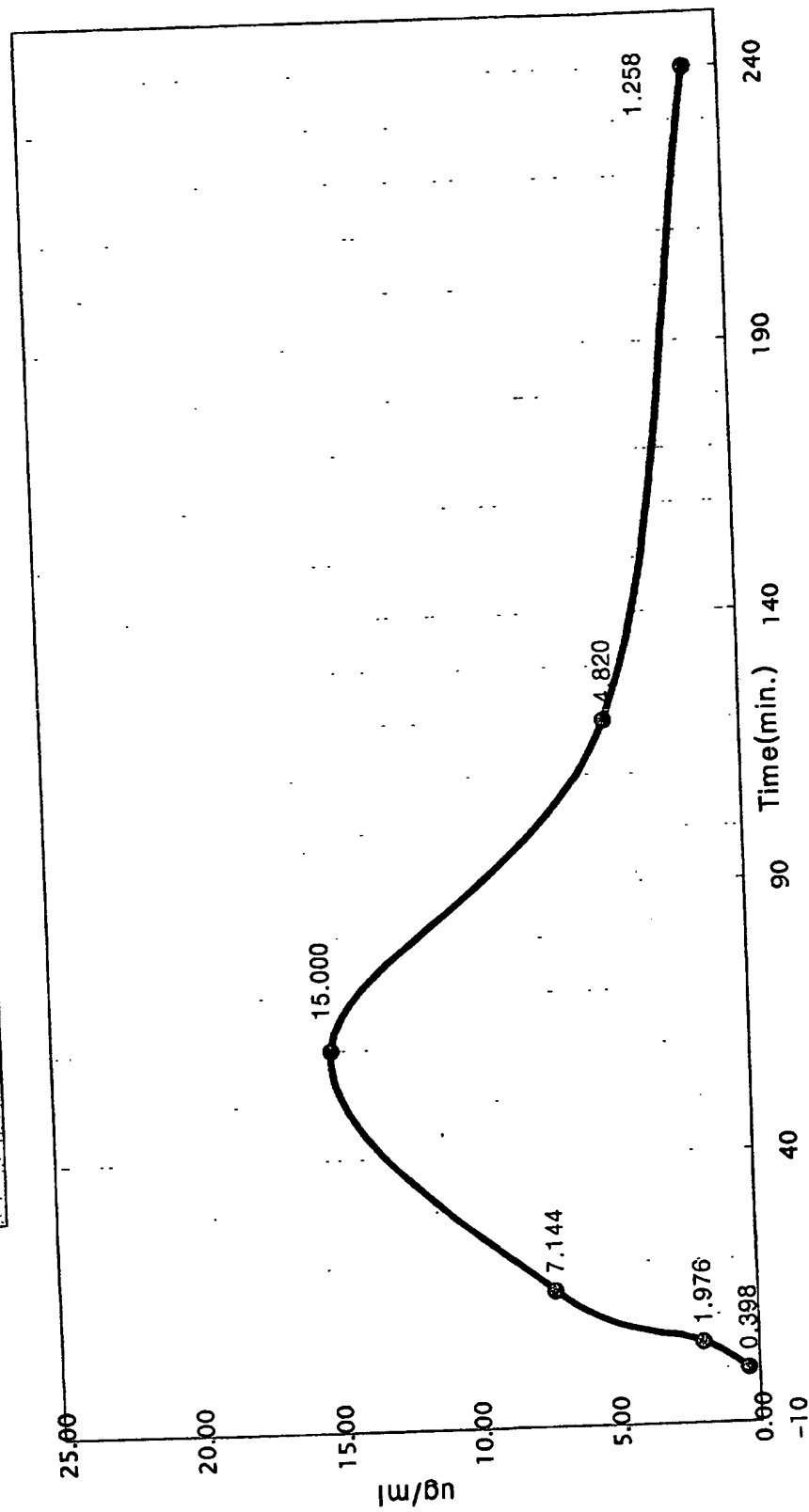
Pharmacokinetic parameters of UDCA in human
After an oral administration of liquid formulation of UDCA
Diagram of the mean (n=5) for Group I
Group I: Dose 600 mg. as solution



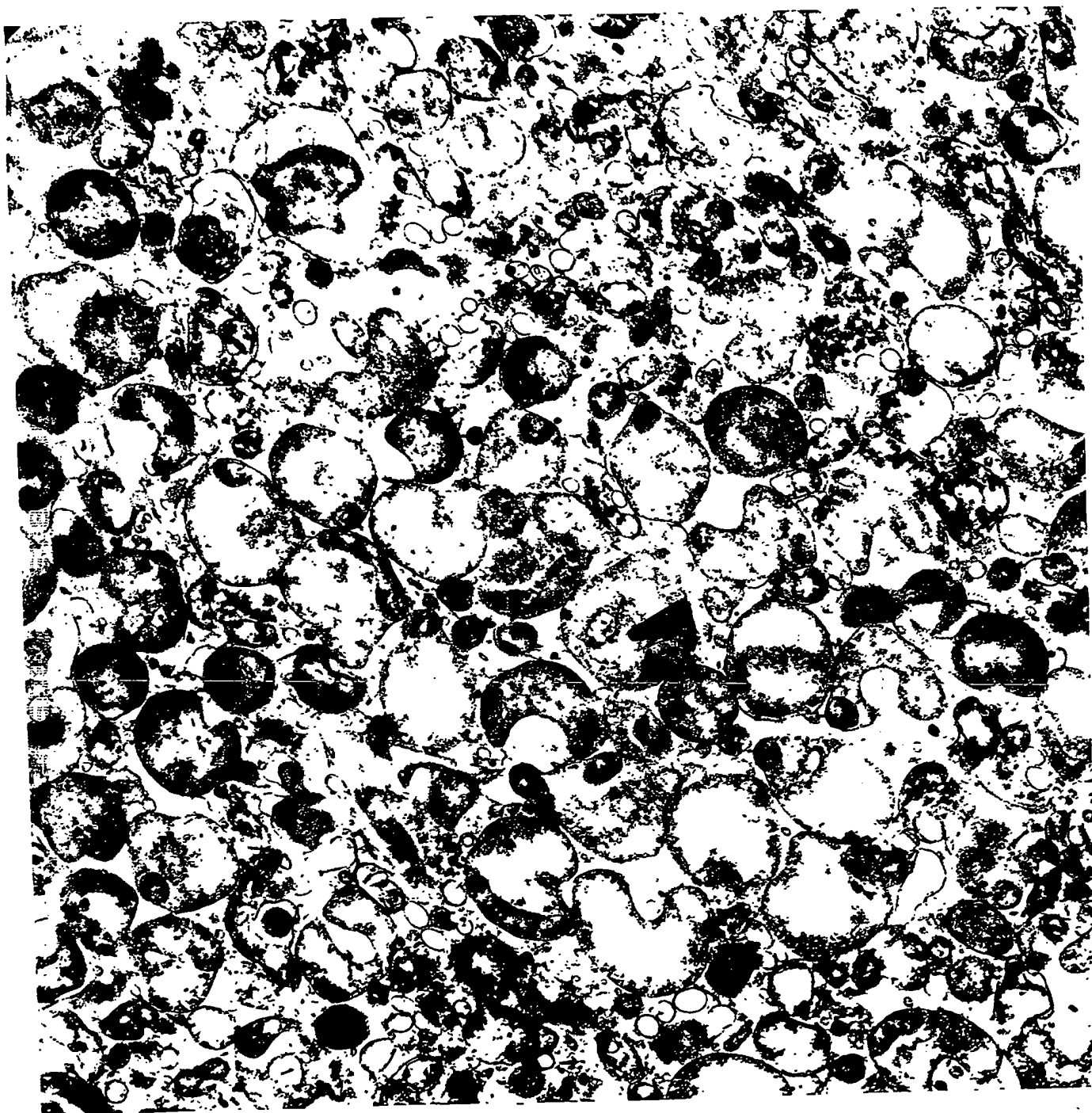
* Each bile acid was detected with standard procedure by LC-1500 Series HPLC
System of Jasco equipped with 3 α -HSD(3 α -hydroxysterol dehydrogenase) column

Figure. 4

Pharmacokinetic parameters of UDCA in human
After an oral administration of liquid formulation of UDCA
Diagram of the mean ($n=5$) for Group II
Group II : Dose 600 mg as syrup



* Each bile acid was detected with standard procedure by LC-1500 Series HPLC System
of JASCO equipped with 3 α -HSD(3 α -hydroxysteroid dehydrogenase) column



H. pylori cultured from Columbia medium pictured by
Transmission Electron Microscope

Figure 5A

1. $\frac{1}{2}$ of the total population of the country
 2. $\frac{1}{4}$ of the total population of the country
 3. $\frac{1}{8}$ of the total population of the country
 4. $\frac{1}{16}$ of the total population of the country
 5. $\frac{1}{32}$ of the total population of the country
 6. $\frac{1}{64}$ of the total population of the country
 7. $\frac{1}{128}$ of the total population of the country
 8. $\frac{1}{256}$ of the total population of the country
 9. $\frac{1}{512}$ of the total population of the country
 10. $\frac{1}{1024}$ of the total population of the country
 11. $\frac{1}{2048}$ of the total population of the country
 12. $\frac{1}{4096}$ of the total population of the country
 13. $\frac{1}{8192}$ of the total population of the country
 14. $\frac{1}{16384}$ of the total population of the country
 15. $\frac{1}{32768}$ of the total population of the country
 16. $\frac{1}{65536}$ of the total population of the country
 17. $\frac{1}{131072}$ of the total population of the country
 18. $\frac{1}{262144}$ of the total population of the country
 19. $\frac{1}{524288}$ of the total population of the country
 20. $\frac{1}{1048576}$ of the total population of the country
 21. $\frac{1}{2097152}$ of the total population of the country
 22. $\frac{1}{4194304}$ of the total population of the country
 23. $\frac{1}{8388608}$ of the total population of the country
 24. $\frac{1}{16777216}$ of the total population of the country
 25. $\frac{1}{33554432}$ of the total population of the country
 26. $\frac{1}{67108864}$ of the total population of the country
 27. $\frac{1}{134217728}$ of the total population of the country
 28. $\frac{1}{268435456}$ of the total population of the country
 29. $\frac{1}{536870912}$ of the total population of the country
 30. $\frac{1}{1073741824}$ of the total population of the country
 31. $\frac{1}{2147483648}$ of the total population of the country
 32. $\frac{1}{4294967296}$ of the total population of the country
 33. $\frac{1}{8589934592}$ of the total population of the country
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 36. $\frac{1}{68719476736}$ of the total population of the country
 37. $\frac{1}{137438953472}$ of the total population of the country
 38. $\frac{1}{274877906944}$ of the total population of the country
 39. $\frac{1}{549755813888}$ of the total population of the country
 40. $\frac{1}{1099511627776}$ of the total population of the country
 41. $\frac{1}{2199023255552}$ of the total population of the country
 42. $\frac{1}{4398046511104}$ of the total population of the country
 43. $\frac{1}{8796093022208}$ of the total population of the country
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 46. $\frac{1}{70368744177664}$ of the total population of the country
 47. $\frac{1}{140737488355328}$ of the total population of the country
 48. $\frac{1}{281474976710656}$ of the total population of the country
 49. $\frac{1}{562949953421312}$ of the total population of the country
 50. $\frac{1}{1125899906842624}$ of the total population of the country
 51. $\frac{1}{2251799813685248}$ of the total population of the country
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 75. $\frac{1}{37778931862957161709568}$ of the total population of the country
 76. $\frac{1}{75557863725914323419136}$ of the total population of the country
 77. $\frac{1}{151115727451828646838272}$ of the total population of the country
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 83. $\frac{1}{9671406556917033397649408}$ of the total population of the country
 84. $\frac{1}{19342813113834066795298816}$ of the total population of the country
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 86. $\frac{1}{77371252455336267181195264}$ of the total population of the country
 87. $\frac{1}{154742504910672534362390528}$ of the total population of the country
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 96. $\frac{1}{79228162514264337593543950336}$ of the total population of the country
 97. $\frac{1}{158456325028528675187087900672}$ of the total population of the country
 98. $\frac{1}{316912650057057350374175801344}$ of the total population of the country
 99. $\frac{1}{633825300114114700748351602688}$ of the total population of the country
 100. $\frac{1}{1267650600228229401496703205376}$ of the total population of the country
 101. $\frac{1}{253530120045645880$



Figure 5B

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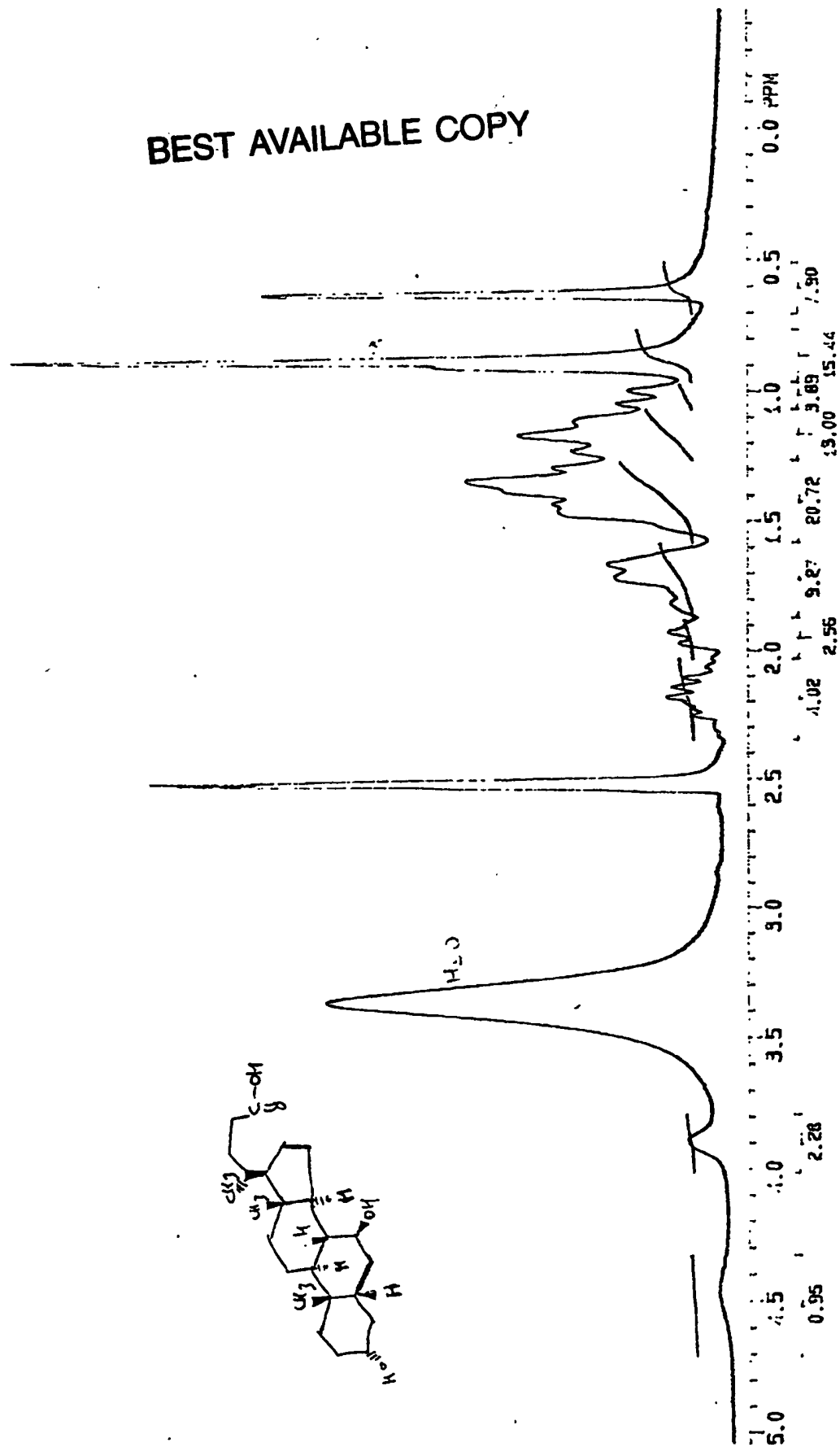
72hrs, after H. pylori treated with UDCA & bismuth citrate
pictured by Transmission Electron Microscope

Figure 5C

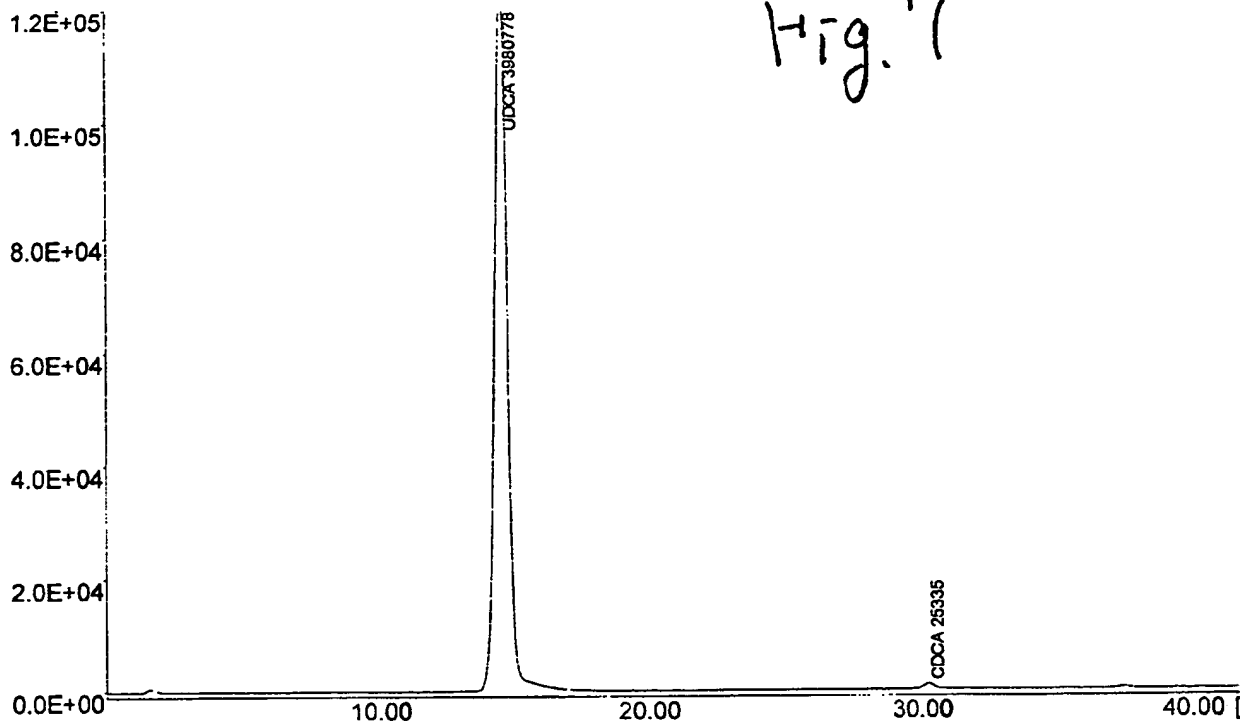
UDCA 1990-1991

Fig.6: NMR data for UDCA in the liquid formulation dosage form:

this data shows that this UDCA is absolutely free UDCA



HPLC for UDCA in the liquid formulation dosage form.



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Info :
GG25STAR250UD5---DW EXT

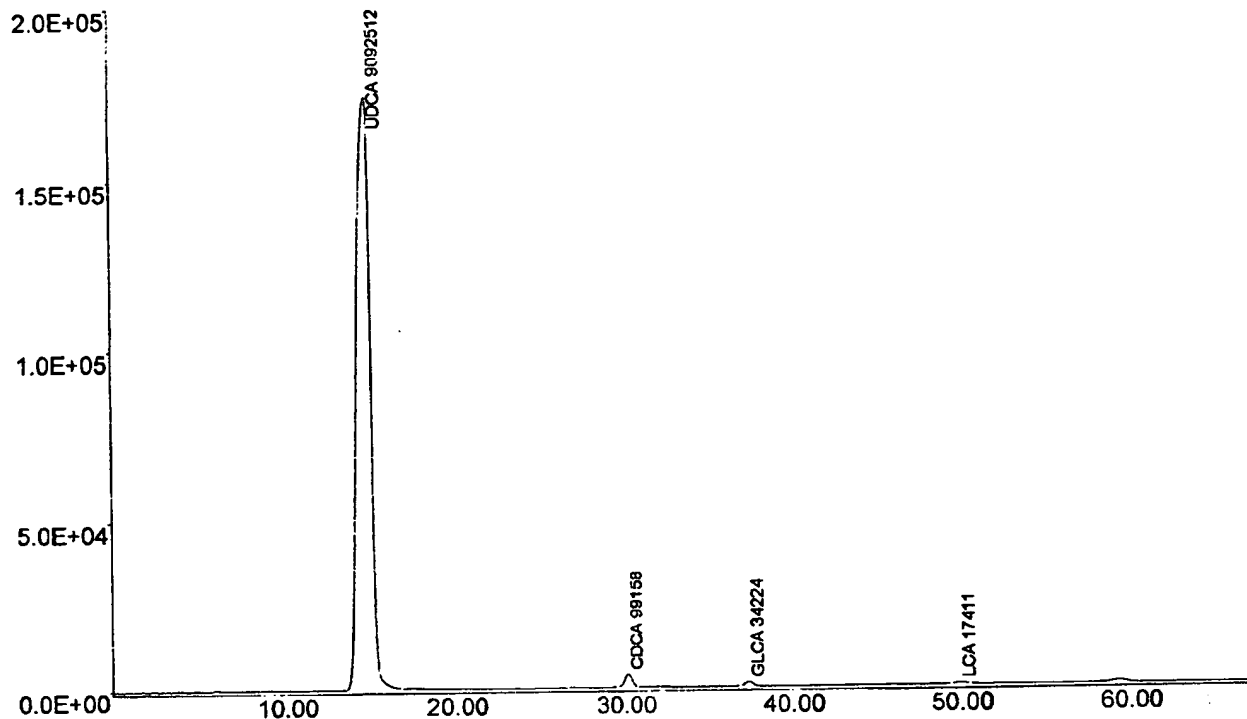
Vial # = 1 Rack # = 1
Injection Date : 26-Jul-2000 16:48:10
Curr. Date : 30-Jan-2001 17:39:30
User : PRIME
Group : DATA
Acquisition Time : 43.85 [min]
Control Method :
Code of system chromatographic : SYSTEM_1

#	Name	RT	Area[.Sec]	%Area
1	UDCA	14.7423980777	50	99.4
2	CDCA	30.483	25335.25	0.6

Total Area of Peak = 4006112.75 [.Sec]
Injection Volume = 10.00 ul

HPLC for standard UDCA

Fig. 8



File name : UDCA724003.CH1

Info :
UDCA 500mg/100ml in MeOH

Vial # = 3 Rack # = 1
Injection Date : 24-Jul-2000 17:20:10
Curr. Date : 30-Jan-2001 17:56:14
User : PRIME
Group : DATA
Acquisition Time : 70.00 [min]
Control Method :
Code of system chromatographic : SYSTEM_1

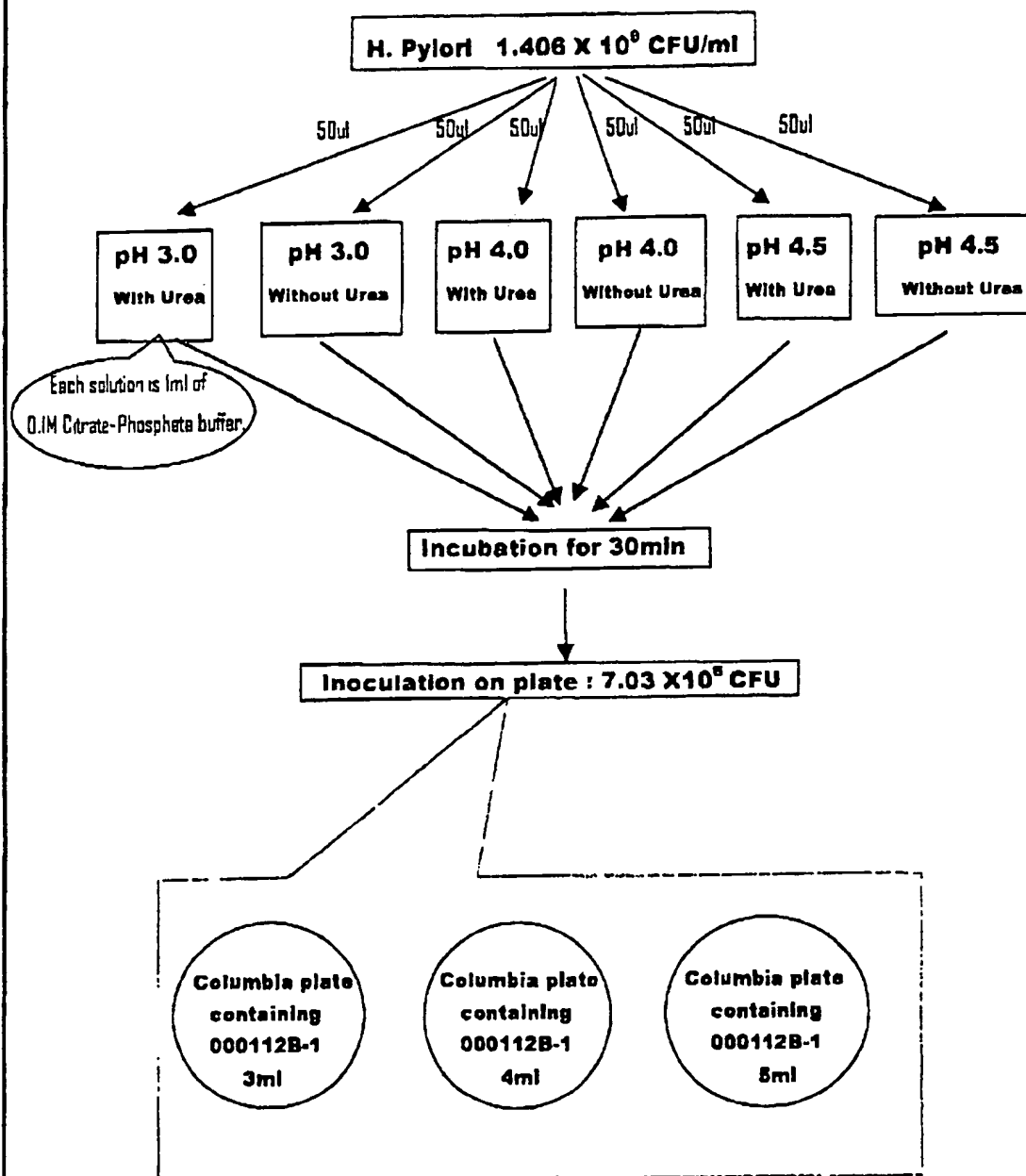
#	Name	RT	Area[.Sec]	%Area
1	UDCA	15.1679092512.25	98.4	
2	CDCA	30.442	99157.50	1.1
3	GLCA	37.675	34224.00	0.4
4	LCA	50.167	17410.75	0.2

Total Area of Peak = 9243304.50 [.Sec]
Injection Volume = 10.00 ul

2000-07-24 17:20:10

◀ Abstracted diagram for the culture method ▶

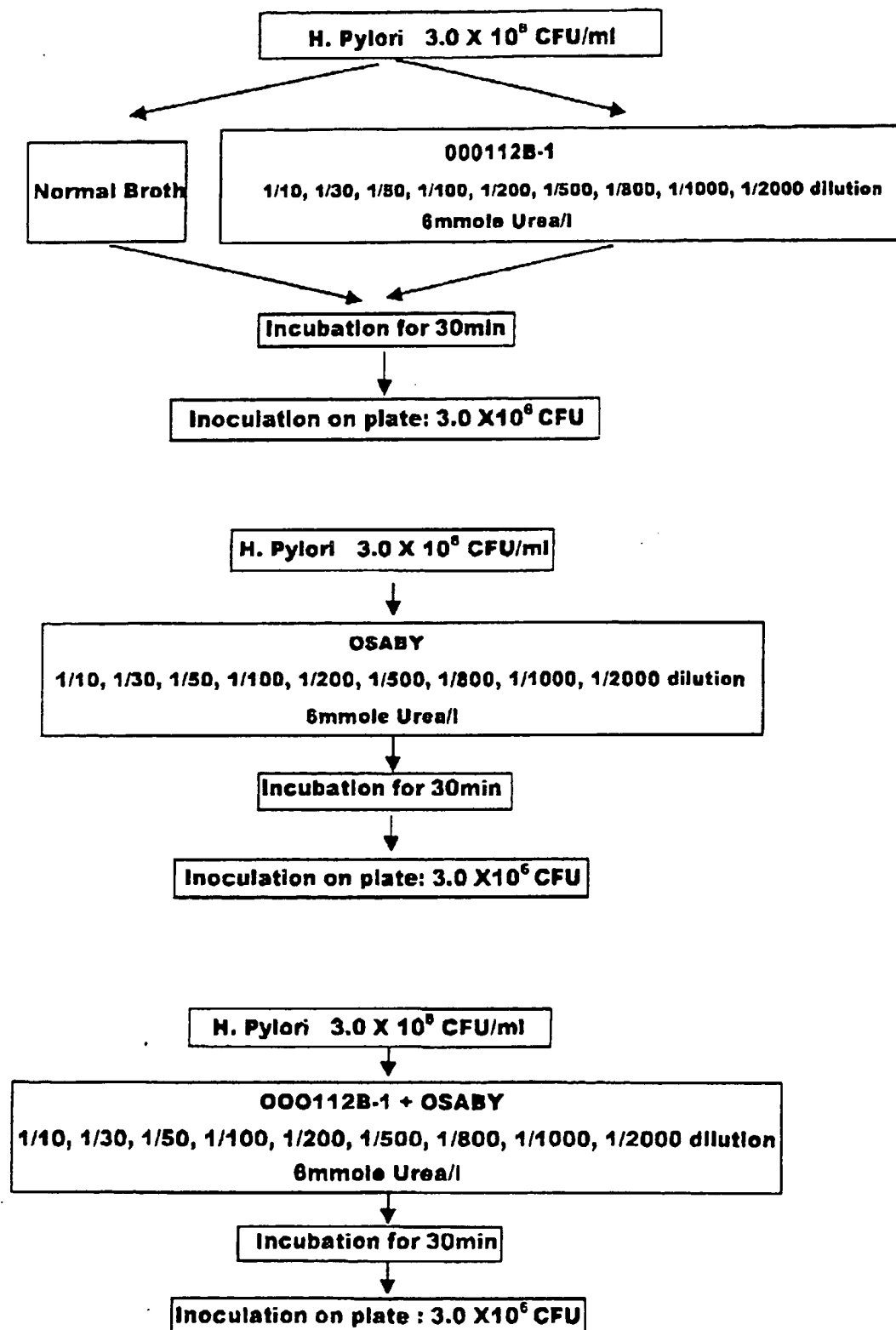
(i) Method with the various pH values.



Plates were incubated microaerophilically at 37°C for 72 hours.

Figure 9

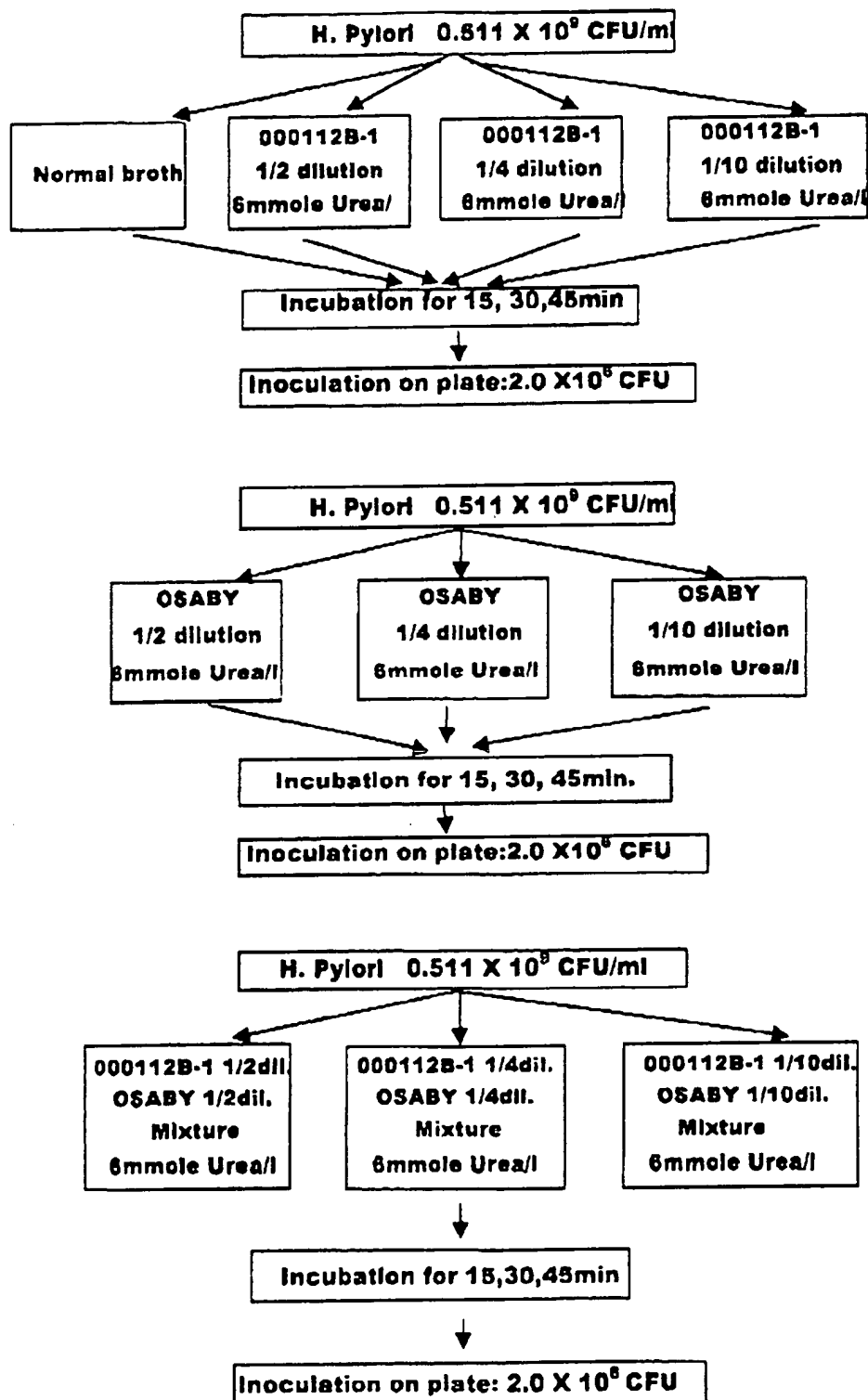
(ii) Method with the various concentrations.



Plates were incubated microaerophilically at 37°C for 72 hours.

Figure 10

(iii) Method with the various concentrations
+ various incubation time



Plates were incubated microaerophilically at 37°C for 72 hours.

Figure 11